

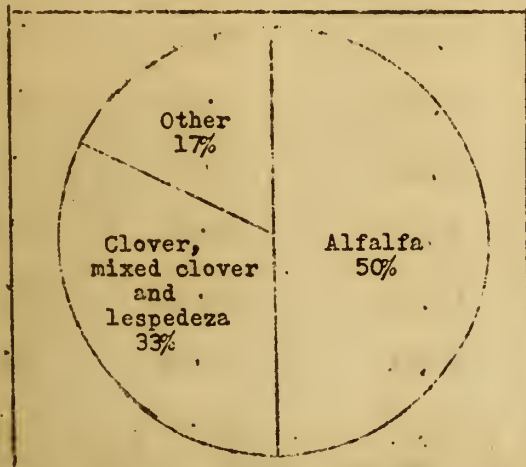
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Roughage Fed To Milk Cows

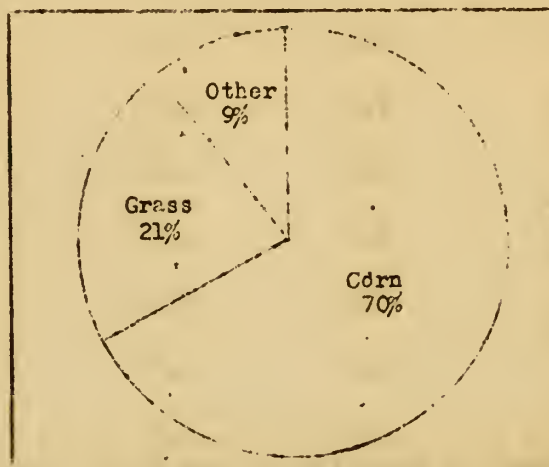
WINTER 1952-53

BUREAU OF AGRICULTURAL ECONOMICS-U.S. DEPARTMENT OF AGRICULTURE
 XX

Kind of Hay



Kind of silage



SUMMARY

Milk cows in dairy reporters' herds were fed an average of 2.2 tons of hay during the October 1952-May 1953 winter feeding season, or about the same as the average of recent years. Silage fed per milk cow totaled 1.9 tons, continuing a gradual upward trend. The hay equivalent of all roughage amounted to 2.9 tons per cow. Alfalfa made up half of the total hay fed to milk cows; clover, clover mixtures, and lespedeza as a group, about one-third; and other miscellaneous hays, one-sixth. Six-sevenths of the hay fed to milk cows was home grown and one-seventh purchased.

The value of the hay fed to milk cows on February 1, 1953 was \$26.48 per ton, the highest for the date in 9 years of record. Of the dairymen reporting on hay, 3 reported baled hay fed for every 2 reporting loose hay, continuing the steady trend toward increased use of baled hay. Corn silage, representing 70 percent of the total silage fed to milk cows, continued to be the most important silage, but grass silage has increased steadily and in the winter of 1952-53 represented 21 percent of the total.

Prepared by John L. Wilson and Herbert M. Walters, Agricultural Statisticians, under the general direction of B. H. Bennett, Head, Division of Dairy Statistics. The 41 State Agricultural Statisticians and members of their staffs collected and summarized the reports of cooperating farmers upon which the series are based.

Washington, D. C.
 June 1953

Table 1. - Amount of hay, silage and other roughage fed per milk cow, winter feeding period ending in May, and value per ton of hay fed to milk cows February 1, herds kept by dairy reporters, United States, 1945-53

Year	Amount fed per cow, winter feeding period ending in May 1/			Value per ton of hay fed to milk cows February 1 2/		
	Hay	Silage	Other roughage	Loose	Baled	All
	Tons	Tons	Tons	Dollars	Dollars	Dollars
1945	2.0	1.4	.3	20.86	25.94	21.94
1946	2.1	1.5	.3	18.43	23.35	19.68
1947	2.1	1.5	.2	20.26	25.81	21.74
1948	2.2	1.5	.2	22.32	27.99	24.27
1949	2.2	1.6	.2	22.19	27.65	24.28
1950	2.2	1.7	.2	20.43	24.54	22.28
1951	2.2	1.6	.2	20.58	24.89	22.87
1952	2.3	1.8	.1	22.41	27.04	25.06
1953	2.2	1.9	.1	23.69	28.08	26.48

1/Based on tonnages fed or to be fed during the October-May winter feeding period divided by the number of milk cows in herd on May 1, the date on which the figures were reported.

2/Differences in values of loose and baled hay fed, reflect variations in kinds of hay represented, proportion of hay purchased, etc., as well as cost of baling.

Table 2. - Kind of hay and silage fed to milk cows in herds kept by dairy reporters, winter feeding period ending in May, 1945-53, United States 1/

Winter feeding period ending May	Hay				Silage			
	Clover	Soybean	Alfalfa	Other	Corn	Sorghum	Grass	Mixed and other
	percentage of total	percentage of total	percentage of total	percentage of total	percentage of total	percentage of total	percentage of total	percentage of total
1945	39	34	3	24	87	7	1	5
1946	40	38	2	20	85	8	1	6
1947	38	40	2	20	87	5	2	6
1948	41	35	2	22	86	5	4	5
1949	44	34	2	20	83	6	6	5
1950	49	30	2	19	83	6	6	5
1951	49	30	2	19	79	6	9	6
1952	51	30	1	18	69	5	20	6
1953	50	33	2	15	70	4	21	5

1/Based on tons of hay and silage fed or to be fed during the October-May winter feeding period reported in response to question asked as of May 1 each year.

ROUGHAGE FED TO MILK COWS
1952-53 WINTER FEEDING SEASON

During the October 1952-May 1953 winter feeding season, milk cows in dairy reporters' herds were fed an average of 2.2 tons of hay, 1.9 tons of silage, and 0.1 ton of other roughage. These rates of roughage feeding were about in line with those of other recent years, except that there has been a gradual increase in amount of silage fed per cow (Table 1). In the 1952-53 feeding season the quantity of silage fed per cow was 0.5 ton or 36 percent higher than 8 years earlier when data on roughage feeding were first collected from dairy reporters. The hay equivalent of all roughage fed, including silage and other dry roughage converted to hay equivalent, was 2.9 tons per cow, the same as during the previous winter feeding period.

By States, the wide variability in amount of roughage fed per milk cow reflected the length of the winter feeding season, quantities of concentrates fed, feed obtained by winter grazing, and general dairy practices in the area. The amount of hay fed per milk cow ranged from less than 1 ton per cow in some of the Gulf Coast States to as high as 4 tons per cow in Utah. In the Mountain States, in which milk cows are kept primarily in irrigated areas where alfalfa is plentiful, rates of hay feeding ranged mostly between 3 and 4 tons per cow. In the principal Northern, Northeastern, and Pacific dairy States, from 2 to 3 tons of hay per cow were commonly fed during the winter season. In the lower central Atlantic Coast and southern interior States, quantities ranged mostly from 1 to 2 tons per cow.

The amount of silage fed per milk cow likewise varied widely. In Wisconsin, Minnesota, and most of the Northeast more than 3 tons of silage were fed per milk cow during the October 1952-May 1953 winter feeding season. In several other important fluid milk States, including Ohio, Michigan, and Virginia, the quantity of silage per cow exceeded 2 tons. In most other northern and central Atlantic Coast States and in the more important Mountain dairy States, 1 to 2 tons were fed. In the lower Atlantic Seaboard States and much of the South, silage fed ranged from very little to about 1 ton per cow.

A little dry roughage other than hay was fed to milk cows rather generally over the country, but appreciable quantities were limited mainly to the sorghum-growing areas. Fodder and bundle feed were used extensively to supplement hay in these areas and constituted most of the "other" roughage fed. The hay equivalent of all roughage fed per milk cow during the winter feeding season exceeded 4 tons in Utah, Idaho, and North Dakota, ranged from 3 to 4 tons in most of the Northeastern, Great Lake, and important Western dairy States, but fell to a level of about 1 ton per cow in the States along the Gulf Coast. As shown in Table 3, this hay equivalent was computed on the basis that 3 tons silage or 2 tons dry roughage other than hay are equivalent to 1 ton of hay.

Legume Hays Predominate

Alfalfa hay made up about half of the hay that dairy reporters fed to their milk cows during the 1952-53 winter feeding season. Clover, mixed clover, and lespedeza made up about one-third and other kinds about one-sixth, as shown in Table 2. Alfalfa hay constituted three-fourths or more of the total hay ration fed to milk cows in all Western States except Washington and Oregon. Alfalfa was also the principal hay fed in the central Great Plains States, Minnesota,

Iowa, Michigan, and Illinois. Clover, clover mixtures, and lespedeza as a group made up about half or more of the total hay fed in the North Atlantic area; Ohio, Missouri, the Middle Atlantic Seaboard States, and Tennessee. The soybean-cowpea-peanut group of hays was fed to some extent in the South, with about 9 percent of the hay fed in the South Central region drawn from these kinds. A wide variety of other hays were fed rather generally over most of the country. The proportion of the hay fed to milk cows falling in each of these general groupings is shown by States in Table 4.



More detailed data on the kinds of hay fed to milk cows based on the number of dairymen feeding them are shown in Table 9. These data underline the preponderance of alfalfa in the Plains and Western States. Among the hays included in the general clover group, clover and timothy was the principal dairy hay in the Northeast and Eastern Great Lake area. Other clover hays were fed rather generally over the country. Lespedeza represented from one-third to one-half of the hay fed in many of the Southern States. Soybean, cowpea, and peanut hay were also fed locally in the South. Some sorghum hay, wild hay, and grain hay were fed to milk cows in the Plains and Western States. Mixed and other hays were important in most areas. Where reports in this group were numerous, they usually included a variety of mixed grass and legume hays fed to milk cows that did not fall readily in more specific single hay classification.

As usual, producers relied principally on home-grown hay for feeding their milk cows. Dairy reporters purchased 14 percent of the hay fed during the 1952-53 winter feeding period, as compared with 11 to 14 percent in recent years. The proportion of purchased hay, however, varied quite widely. In the more important North Central States of Wisconsin, Minnesota, and Iowa, only 3 to 4 percent of the hay fed to milk cows was purchased. In northern States farther east the proportion purchased was slightly larger but exceeded 12 percent only in Southern New England. At the other extreme, California dairy reporters bought more than three-fourths of the hay fed to milk cows and in Oklahoma, Texas, and Oregon a third or more was purchased. The proportion of hay purchased in the winter of 1952-53 was up sharply from the average for recent years in Kansas, Arkansas, Oklahoma, Texas, and some other States where hay production was cut by the drought. Data on proportion of hay purchased are shown in Table 5.

More Baled Hay Fed

Baled hay represents a rapidly increasing proportion of the hay fed to milk cows. A count of the frequency of reports on hay fed to milk cows on February 1, 1953 showed 60 percent of the reports indicating baled hay fed and 40 percent loose hay fed. The proportion reporting baled hay is the highest in 9 years of record and compares with 53 percent in 1952, 41 percent in 1949, and 24 percent in 1945, the first year for which data were available. Increased use of field balers in recent years has had a marked influence on the form in which hay is put up for feeding milking animals.

Reports on baled hay constituted more than three-fourths of the total hay reports in New Jersey, Illinois, Missouri, Louisiana, Oklahoma, Texas, and California. On the other hand, in northern New England, the western Great Lake States, and the northern Great Plains States, loose hay continued to predominate in feeding milk cows. In Wisconsin, North Dakota, Montana, and Wyoming, reports on loose hay fed to milk cows were about twice as numerous as reports on baled hay.

Hay Costly Last Winter

The hay fed to milk cows on February 1, 1953 was reported worth more per ton than in any other of the 9 years for which records are available. For the United States as a whole the hay fed to milk cows was valued by dairy reporters at \$26.48 per ton, compared with \$25.06 on February 1, 1952 and from \$19.68 to \$24.28 in the preceding 7 years. Loose hay fed to milk cows was valued at \$23.69 per ton as compared with baled hay at \$28.08. The difference represented not only the cost of baling but also some differences in kinds and quality of the hay. The value of hay fed to milk cows was highest in Florida at \$48.50 per ton, and was only a little less than \$40 per ton in Oklahoma and Texas. On the other hand, cheapest hay was available in the northern Great Plains and western Great Lake States, mostly from \$16 to \$19 per ton. Sharp increases in hay values as compared to a year earlier were reported in Nebraska, Kansas, Missouri, Arkansas, and Oklahoma, all in the heart of the 1952 fall drought area. Moderate increases as compared to a year earlier were recorded in Pennsylvania, Ohio, and most of the other Central States. In the West, however, the value per ton of hay fed to milk cows on February 1, 1953 was generally below a year earlier, with decreases ranging from about \$3 per ton on the West Coast to as much as \$14 per ton in Utah. Data on the value of loose, baled, and all hay fed to milk cows are shown in Table 7.

Grass Silage Becoming Important

Of the silage fed to milk cows in the 1952-53 winter feeding period, 70 percent was corn silage, 21 percent grass silage, 4 percent sorghum silage, and 5 percent mixed or other silage. Over the 9-year period for which records are available, there has been a rapid increase in proportion of grass silage fed, chiefly at the expense of corn and sorghum silage (Table 2). In the 1952-53 winter feeding season, grass silage represented 21 percent of the total, only slightly more than in the previous winter but double the proportion in the 1950-51 season and five times as much as in the winter of 1947-48. Increasing interest in grass land farming and machinery to convert the difficult-to-cure first cutting of hay into silage have done much to interest dairymen in the use of grass silage. Interest in grass silage has been most active in the Northeast, North Central and Pacific Northwest sections of the country. As shown in Table 6, grass silage made up nearly half the total silage in northern New England, Ohio, and the northern Pacific Coast States, and about one-third of the total in southern New England, Pennsylvania, Indiana, and Iowa.

Table 3. - Amount of hay, silage, and other roughage fed per milk cow in herds by dairy reporters, winter feeding period ending in May, by States, 1952 and 1953 ^{1/}

State and Division	Hay		Silage		Other roughage		Hay equivalent of all roughage ^{2/}	
	1952	1953	1952	1953	1952	1953	1952	1953
	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons
Me., N.H., Vt.	2.6	2.8	2.5	2.4	---	---	3.5	3.6
Mass., R.I., Conn.	2.1	2.2	3.8	4.1	.1	.1	3.4	3.7
N. Y.	2.8	2.7	3.1	3.2	.1	.1	3.9	3.8
N. J.	2.1	2.3	3.0	3.1	.1	.1	3.1	3.4
Pa.	2.3	2.2	2.9	3.2	---	---	3.3	3.3
N. Atl.	2.6	2.5	3.0	3.2	.1	---	3.6	3.6
Ohio	2.5	2.2	1.3	2.1	.2	.2	3.0	3.0
Ind.	2.2	2.2	1.2	1.6	.1	.1	2.6	2.8
Ill.	2.3	2.5	1.6	1.6	.1	---	2.8	3.0
Mich.	2.7	2.9	2.2	2.4	.1	.1	3.5	3.7
Wis.	2.6	2.5	3.7	3.8	---	.1	3.8	3.8
E. N. Cent.	2.5	2.5	2.4	2.7	.1	.1	3.4	3.4
Minn.	2.9	2.8	2.9	3.1	.2	.1	3.9	3.9
Iowa	2.4	2.3	1.6	1.7	---	.1	2.9	2.9
Mo.	2.4	2.1	1.5	1.7	.1	.1	3.0	2.7
N. Dak.	3.8	3.6	1.6	1.5	.4	.5	4.5	4.3
S. Dak.	3.0	2.5	1.8	1.0	.3	.5	3.7	3.0
Nebr.	2.3	2.3	.7	1.0	.2	.2	2.6	2.7
Kans.	2.0	1.5	1.9	1.5	.3	.4	2.8	2.2
W. N. Cent.	2.6	2.4	1.2	1.9	.2	.2	3.3	3.1
Del., Md.	2.1	2.0	2.6	2.0	---	.1	3.0	2.8
Va.	2.0	1.9	1.8	2.3	.1	.1	2.6	2.7
W. Va.	2.0	1.9	1.0	1.6	.3	.2	2.5	2.5
N. C.	1.8	1.8	1.4	1.3	.2	.2	2.3	2.3
S. C., Ga.	1.6	1.3	1.0	.9	.1	.1	2.1	1.6
S. Atl.	1.8	1.6	1.5	1.4	.1	.1	2.3	2.1
Ky.	2.0	1.9	1.2	1.0	.2	.2	2.5	2.3
Tenn.	1.6	1.4	.4	.4	.1	.2	1.8	1.6
Ala.	.8	.9	.1	---	.1	.1	.9	1.0
Miss.	.8	1.0	a/	a/	a/	a/	1.0	1.1
Ark.	1.7	1.4	.1	.3	.1	.1	1.8	1.5
La.	.6	.8	.2	.1	.1	.1	.7	.9
Okla.	1.7	1.7	1.0	.9	.4	.3	2.2	2.1
Tex.	1.2	1.3	1.0	.8	.3	.2	1.7	1.7
S. Cent.	1.3	1.3	.7	.6	.2	.2	1.7	1.6
Mont.	3.1	2.9	.2	.1	.1	.2	3.2	3.0
Idaho	3.6	3.7	.8	1.2	.1	---	3.9	4.1
Wyo.	3.4	3.4	a/	a/	a/	a/	3.9	3.8
Colo.	2.5	3.0	2.0	1.7	.4	.2	3.3	3.7
Utah	3.8	4.0	1.9	1.8	.1	---	4.4	4.6
Wash.	2.4	2.8	1.4	2.1	.1	.2	2.9	3.6
Oreg.	2.4	2.5	a/	a/	a/	a/	2.9	2.9
Calif.	3.0	2.9	.4	.5	---	.1	3.2	3.1
West.	2.9	3.0	1.0	1.1	.1	.1	3.2	3.4
U. S.	2.3	2.2	1.8	1.9	.1	.1	2.9	2.9

^{1/}Based on tonnages fed during the October-May winter feeding period and numbers of milk cows in herds May 1, the date on which the figures were reported.

^{2/}In computing total hay equivalent, 3 tons of silage or 2 tons other roughage were considered equal to 1 ton of hay.

a/Data not shown where reports are insufficient to establish a stable average.

Table 4.-- Kind of hay fed to milk cows in herds kept by dairy reporters,
winter feeding period ending in May, by States, 1952 and 1953 ^{1/}

State	Alfalfa		Clover, mixed		Soybean,		Other	
and			clover and lespedeza:		cowpea, peanut:			
Division	1952	1953	1952	1953	1952	1952	1952	1953
Percentage of Total								
Me., N.H., Vt.,	8	3	45	2/86	-	-	47	11
Mass., R.I., Conn.	14	8	41	2/68	-	-	45	24
N.Y.	17	22	45	49	1	-	37	29
N.J.	44	42	37	39	3	1	16	18
Pa.	29	29	49	60	1	1	21	10
N. Atl.	20	21	45	58	1	-	34	21
Ohio	39	43	49	48	3	-	9	9
Ind.	42	48	46	46	5	2	7	4
Ill.	61	57	35	37	1	4	3	2
Nich.	64	60	28	30	-	-	8	10
Wis.	52	52	37	41	-	-	4	7
E.N.Cent.	55	52	38	40	1	1	6	7
Minn.	68	74	14	16	1	1	17	9
Iowa	61	66	30	29	-	-	9	5
Mo.	37	32	45	47	1	3	17	18
N.Dak.	37	40	1	6	-	-	62	54
S.Dak.	58	61	2	2	-	-	40	37
Nebr.	73	75	7	9	-	-	20	16
Kans.	76	68	5	15	-	-	19	17
M.N.Cent.	59	61	12	21	-	1	22	17
Del., Md.,	28	32	58	52	4	2	10	14
Va.	44	52	41	37	5	2	10	9
W.Va.	30	28	47	49	1	2	22	21
H.C.	30	26	52	53	6	8	12	13
S.C., Ga.,	16	11	48	51	17	8	19	30
S. Atl.	31	33	50	47	6	4	13	16
Ky.	39	31	47	41	6	14	8	14
Tenn.	19	24	65	57	8	10	8	9
Ala.	22	9	29	36	30	21	19	34
Ark.	10	19	68	41	4	5	18	35
Okla.	49	52	12	10	5	3	34	35
Tex.	32	34	-	-	3	2	65	64
S.Cent.	31	30	33	29	6	9	30	32
Mont.	72	76	12	7	-	-	16	17
Idaho	76	92	14	5	-	-	10	3
Colo.	93	87	1	6	-	-	6	7
Ariz.	96	92	2	-	-	-	2	8
Utah	89	90	3	4	-	-	8	6
Wash.	41	32	28	22	-	1	31	45
Oreg.	46	45	18	19	-	-	36	36
Calif.	93	90	1	2	-	-	6	8
West.	79	78	8	7	-	-	13	15
U.S.	51	50	30	33	1	2	18	15

^{1/}For October-May winter feeding period as reported May 1.

^{2/}Includes mixed hays other than clover.

Table 5.-- Purchased hay as percentage of all hay fed to milk cows
in herds kept by dairy reporters, winter feeding season
ending May, 1946-53 1/

State and Division	1946	1947	1948	1949	1950	1951	1952	1953
Percentage of Total								
Me., N.H., Vt.	2	5	2	7	7	6	4	7
Mass., R.I., Conn.	6	9	7	4	19	6	10	19
N.Y.	2	1	2	4	5	3	3	4
N.J.	12	10	12	11	12	12	19	9
Pa.	2	4	4	4	3	3	4	7
N. Atl.	3	4	3	5	6	4	5	7
Ohio	7	14	6	6	10	7	9	8
Ind.	6	6	12	10	10	6	13	8
Ill.	7	9	10	11	14	12	9	12
Mich.	5	6	3	8	7	7	9	6
Wis.	3	5	4	8	6	5	3	3
E.N.Cent.	5	8	6	8	8	7	7	6
Minn.	3	5	5	9	8	8	4	4
Iowa	5	5	7	9	6	7	3	4
Mo.	15	24	17	20	18	18	14	21
N.Dak.	2	4	1	2	5	2	3	4
S.Dak.	3	11	9	5	7	6	2	9
Nebr.	10	9	10	14	14	12	10	12
Kans.	17	17	21	16	9	8	12	31
W.N.Cent.	7	9	9	10	9	9	6	9
Del., Md., Va.	7	3	5	3	4	3	2	6
W.Va.	13	4	8	3	15	9	8	10
N.C.	3	7	5	5	3	2	6	10
S.C., Ga.	7	10	15	8	7	8	9	8
S. Atl.	8	7	21	12	8	10	12	17
Ky.	9	6	10	6	19	8	9	10
Tenn.	6	9	2	7	7	11	14	13
Ala.	6	4	7	6	5	6	7	19
Miss.	25	12	10	11	26	13	26	32
Ark.	5	12	6	12	5	6	4	8
La.	24	37	14	10	6	12	12	31
Okla.	27	31	35	37	22	31	14	18
Tex.	23	29	24	38	32	27	22	40
S. Cent.	28	37	36	32	33	42	48	58
Mont.	12	22	19	22	18	21	22	30
Idaho	17	18	18	19	22	13	12	13
Wyo.	16	29	23	24	18	22	23	19
Colo.	35	15	14	31	7	9	11	21
Aric.	24	26	24	22	36	31	33	28
Utah	37	44	55	61	33	56	39	53
Wash.	13	18	13	19	14	20	19	14
Oreg.	23	38	34	25	35	27	35	21
Calif.	15	24	29	23	32	35	41	34
West.	24	64	75	26	28	74	72	78
U.S.	29	42	45	44	46	44	50	46
U.S.	10.9	12.8	12.6	13.9	14.1	13.0	13.0	14.4

1/Based on quantities fed, or to be fed, during the October-May winter feeding season, reported in response to question asked as of May 1 each year.

Table 6.- Kind of silage fed to milk cows in herds kept by dairy reporters, winter feeding period ending in May, selected States, 1946-50 average, 1951-52 average, and 1953 ¹/₁

State and Division	Corn silage			Sorghum silage			Grass silage			Mixed and other silage		
	:1946-:1951-:			:1946-:1951-:			:1946-:1951-:			:1946-:1951-:		
	:1950 :1952 :1953:			:1950 :1952 :1953:			:1950 :1952 :1953:			:1950 :1952 :1953:		
	:av.	:av.	:	:av.	:av.	:	:av.	:av.	:	:av.	:av.	:
Percentage of total												
Me., N.H., Vt.	81	72	53	--	--	--	13	28	46	6	--	1
Mass., R.I., Conn.	87	64	63	--	--	--	8	34	37	5	2	--
N. Y.	86	78	72	--	--	--	12	19	26	2	3	2
N. J.	84	78	84	3	7	4	13	14	12	--	1	--
Pa.	89	66	62	--	--	--	5	22	36	6	12	2
N. Atl.	86	72	67	--	--	--	10	22	31	4	5	2
Ohio	91	50	40	--	1	--	6	45	47	3	4	13
Ind.	86	77	63	7	4	8	3	19	29	4	--	--
Ill.	95	72	80	2	2	7	1	16	13	2	10	--
Mich.	96	94	90	--	--	--	2	6	9	2	--	1
Mis.	95	86	79	--	--	--	1	11	18	4	3	3
E. N. Cent.	94	82	75	1	1	1	2	14	21	3	3	3
Minn.	96	89	83	--	--	--	--	9	15	4	2	2
Iowa	93	74	67	2	8	--	4	15	33	1	3	--
Mo.	49	54	48	45	28	33	2	5	6	4	13	13
N. Dak.	96	96	100	--	--	--	--	3	--	4	1	--
S. Dak.	100	86	96	--	--	--	--	2	4	--	12	--
Kans.	18	7	31	76	74	47	2	2	3	4	17	19
W. N. Cent.	83	72	71	13	14	10	1	9	15	3	5	4
Del., Md.	86	81	76	2	--	--	5	13	22	7	6	2
Va.	78	90	86	1	--	--	3	8	3	18	2	11
W. Va.	81	77	75	--	--	--	4	23	25	15	--	--
N. C.	96	89	90	2	4	--	--	--	--	2	7	10
S. Atl.	80	82	81	4	4	1	2	8	10	14	6	8
Ky.	85	67	72	--	--	--	2	6	7	13	27	21
Okla.	5	15	74	90	67	21	2	2	--	3	16	5
S. Cent.	34	37	52	49	45	24	2	6	3	15	12	21
Idaho	56	90	82	--	--	--	--	--	12	44	10	6
Colo.	82	98	100	3	--	--	--	--	--	15	2	--
Utah	71	86	93	--	--	--	--	--	--	29	14	7
Wash.	17	14	11	13	--	--	40	69	60	30	17	29
Oreg.	45	34	34	--	--	--	27	58	40	28	8	26
West.	49	58	60	4	--	1	15	26	23	32	16	16
U. S.	85	74	70	6	6	4	4	14	21	5	6	5

¹/Data are shown only for those States where the amount fed during the October-May winter feeding season averaged more than 3/4 ton per cow.

Table 7 - Value per ton of hay fed to milk cows in herds kept by dairy reporters, February 1, 1945-49 average, and 1952-53 ¹/₁

State and Division	Loose hay			Baled hay			All hay		
	: 1945-49 : Average	: 1952 : Average	: 1953 : Average	: 1945-49 : Average	: 1952 : Average	: 1953 : Average	: 1945-49 : Average	: 1952 : Average	: 1953 : Average
D o l l a r s									
Me., N.H., Vt.	21.20	22.00	22.00	29.33	29.00	28.00	23.81	25.00	24.50
Mass., R.I., Conn.	28.41	30.50	30.00	37.52	36.50	35.50	32.35	34.00	34.00
N. Y.	17.98	18.50	20.00	22.76	22.00	24.00	19.28	20.50	22.50
N. J.	29.93	29.50	27.50	35.33	37.00	36.00	32.65	35.50	34.00
Pa.	21.75	21.50	26.50	27.81	29.50	30.50	23.11	25.00	29.00
N. Atl.	20.94	21.37	22.27	27.01	26.79	27.38	22.76	24.14	25.20
Ohio	20.17	21.00	24.00	26.36	26.00	29.50	21.62	23.50	27.00
Ind.	21.29	21.50	24.00	24.37	24.00	26.50	22.38	23.00	25.50
Ill.	21.29	20.50	23.50	24.61	22.50	26.00	23.06	22.00	25.50
Mich.	20.21	18.00	19.50	24.42	20.00	23.50	21.10	19.00	21.50
Wis.	20.99	15.50	17.50	26.22	16.50	20.00	21.63	16.00	18.50
E. N. Cent.	20.82	18.28	20.60	25.45	20.43	23.54	21.86	19.39	22.17
Minn.	15.95	16.50	17.00	21.76	19.00	20.00	16.71	17.50	18.50
Iowa	18.08	17.00	19.50	21.69	18.50	21.50	18.98	18.00	20.50
Mo.	19.61	22.00	28.00	22.70	27.00	32.00	20.86	25.50	32.00
N. Dak.	9.75	14.00	14.50	15.05	20.00	20.00	9.99	15.50	16.50
S. Dak.	12.16	15.00	18.00	19.10	17.50	20.50	12.73	16.00	19.00
Nebr.	16.30	16.00	23.00	22.43	22.00	29.00	17.64	18.00	25.00
Kans.	16.62	19.50	27.00	22.39	27.00	38.00	18.76	24.00	35.00
W. N. Cent.	16.17	17.36	20.40	21.26	21.07	24.37	17.17	19.17	22.75
Del., Md.	25.27	27.00	30.50	29.58	31.50	35.00	26.65	30.00	33.50
Va.	28.76	35.50	37.00	35.10	38.50	40.00	30.21	37.00	38.50
W. Va.	27.10	28.00	30.00	36.98	35.50	35.50	28.24	29.00	31.50
N. C.	29.97	31.00	34.50	34.50	36.00	34.50	31.32	33.50	34.50
S. C., Ga.	30.52	32.50	33.50	34.62	37.50	37.00	32.33	35.50	36.00
Fla.							46.05	54.00	48.50
S. Atl.	28.53	30.84	32.90	34.31	36.42	36.81	30.27	33.95	35.54
Ky.	24.78	28.50	30.00	23.23	32.50	34.50	26.27	30.50	33.00
Tenn.	27.57	31.50	34.00	30.42	34.50	37.00	28.52	33.00	36.00
Ala.	27.72	32.00	30.50	31.20	35.50	34.00	29.53	34.00	32.50
Miss.	23.96	24.00	26.00	27.10	31.50	32.00	25.45	27.50	29.00
Ark.	21.92	24.00	27.50	25.11	28.50	34.00	23.57	26.50	32.50
La.	22.15	29.00	26.50	32.44	37.00	36.00	28.90	34.50	34.50
Okla.	18.83	24.00	29.00	23.54	33.00	40.50	22.12	30.50	39.00
Tex.	22.03	36.50	29.50	25.95	40.50	40.50	24.80	40.00	39.50
S. Cent.	23.35	29.26	29.87	27.10	34.48	36.55	25.46	32.56	35.06
Mont.	17.31	32.00	24.50	24.36	38.50	30.50	17.97	34.00	26.50
Idaho	20.92	33.50	23.00	26.83	37.00	26.00	21.65	35.00	24.50
Wyo.	18.16	27.00	24.50	24.24	34.50	31.50	19.03	29.50	26.50
Colo.	18.39	33.00	28.00	27.21	41.00	33.50	19.56	37.00	31.00
Utah	23.21	35.50	23.00	29.16	42.00	26.00	24.41	38.50	24.50
Wash.	24.16	29.50	26.50	35.21	40.50	34.50	27.00	33.50	30.50
Oreg.	22.90	30.50	30.00	31.66	39.00	35.00	25.13	36.50	33.00
Calif.	26.74	29.50	30.00	32.15	40.00	36.00	30.15	38.50	35.00
West.	23.95	31.12	28.04	30.92	39.95	33.84	26.57	37.10	32.09
U.S.	20.81	22.41	23.69	26.15	27.04	28.08	22.38	25.06	26.48

¹/Averages of reports by farmers in reply to the question "What is the value per ton of hay being fed to milk cows on your farm? (If feeding purchased hay report delivered cost; if feeding home-grown hay estimate the price it would bring at your farm; if feeding both home-grown and purchased, give your best estimate of average value.) Give value only for the type of hay being fed." Annual figures for individual States have been rounded to the nearest half dollar.

Table 8.—Reports on baled hay as percentage of all reports on hay fed to milk cows in herds kept by dairy reporters, February 1, 1945-53 ^{1/}

State and Division	1945	1946	1947	1948	1949	1950	1951	1952	1953
	P e r c e n t								
Me., N.H., Vt.	28	27	33	32	41	51	48	45	44
Mass., R.I., Conn.	42	35	36	52	53	59	49	58	69
N. Y.	20	30	32	34	35	41	47	55	60
N. J.	41	46	47	56	61	69	74	79	80
Pa.	18	18	20	24	29	36	44	45	60
N. Atl.	23	26	29	32	36	43	47	51	59
Ohio	16	15	25	27	33	42	38	48	58
Ind.	24	31	35	40	51	59	58	67	71
Ill.	39	45	53	59	68	73	83	81	86
Mich.	8	17	17	24	35	33	47	44	51
Misc.	3	10	14	14	23	24	26	29	35
N. W. Cent.	17	23	28	32	41	46	49	53	59
Minn.	6	8	9	15	24	28	34	41	47
Iowa	18	17	22	30	38	48	56	59	66
Mo.	36	36	37	46	55	58	65	71	76
N. Dak.	1	3	4	3	8	14	21	24	34
S. Dak.	7	7	8	8	10	23	31	34	39
Nebr.	7	10	23	28	30	31	34	31	38
Kans.	26	19	42	44	45	59	58	62	72
W. N. Cent.	16	16	22	28	34	41	46	50	57
Del., Md.	16	26	31	34	45	52	57	65	72
Va.	25	17	18	26	26	32	51	48	61
W. Va.	11	12	8	17	10	14	29	13	28
N. C.	28	21	33	34	31	39	42	44	56
S. C., Ga.	39	47	44	50	42	54	68	64	70
S. Atl.	26	25	26	32	30	37	49	46	57
Ky.	39	35	37	51	51	46	49	54	67
Tenn.	32	31	24	36	40	44	47	51	59
Ala.	54	57	44	58	52	59	54	65	62
Miss.	43	45	54	51	49	40	45	46	48
Ark.	55	51	48	57	52	55	56	56	73
La.	56	63	67	61	76	89	85	70	86
Okla.	59	70	67	78	69	75	73	70	89
Tex.	60	67	76	72	72	87	92	84	91
S. Cent.	50	52	53	60	58	62	64	64	72
Mont.	6	6	12	9	14	21	20	27	36
Idaho	7	9	10	18	24	34	47	44	50
Wyo.	15	17	8	13	33	18	24	30	30
Colo.	15	11	13	12	23	27	41	45	54
Utah	7	9	15	39	28	35	43	44	52
Wash.	19	29	30	37	39	38	44	35	53
Oreg.	19	25	21	29	34	52	45	66	57
Calif.	53	59	66	66	69	75	85	86	86
West.	21	25	25	32	35	42	47	51	56
U. S.	24.3	26.9	30.6	35.9	40.6	46.1	50.7	53.4	60.2

^{1/}Based on hay on which values were reported, see footnote ^{1/}, Table 7.

Table 9.- Relative frequency of reports on different kinds of hay fed to milk cows, by States, February 1, 1953 ¹/₁

State and Division	Alfalfa	Clover	Clover and timothy	Lespedeza	Soybean	Cowpea	Peanut	Grain	Sorghum	Wild	Mixed and other
Percentage of total											
Me., N.H., Vt.	5	37	6	-	-	-	-	-	-	-	52
Mass., R.I., Conn.	19	26	4	-	-	-	-	-	-	-	51
N.Y.	21	52	11	-	-	-	-	-	-	-	2/16
N.J.	22	26	4	-	4	-	-	-	-	-	44
Pa.	33	32	4	-	1	-	-	-	-	-	25
N. Atl.	23	42	7	-	-	-	-	-	-	-	28
Ohio	12	29	9	-	1	-	-	-	-	-	49
Ind.	29	3/53	-	4	6	-	-	-	-	-	8
Ill.	26	10	20	2	2	-	-	-	-	-	40
Mich.	23	23	6	-	1	-	-	-	-	-	47
Wis.	16	20	3	-	-	-	-	-	-	-	61
E. N. Cent.	20	26	8	1	2	-	-	-	-	-	43
Minn.	60	13	9	-	-	-	-	-	-	5	13
Iowa	51	11	24	-	-	-	-	-	-	-	14
Mo.	29	16	22	26	5	-	-	-	-	2	-
N. Dak.	38	-	2	-	-	-	-	3	-	18	39
S. Dak.	47	-	-	-	-	-	-	-	-	9	44
Nebr.	72	1	-	-	-	-	-	-	1	7	19
Kans.	59	-	6	3	3	-	-	-	12	12	5
W. N. Cent.	51	8	12	5	1	-	-	-	2	6	15
Del., Md.	27	17	17	13	5	-	-	-	-	-	21
Va.	22	8	5	17	-	-	3	1	-	-	44
W. Va.	19	28	9	10	1	1	-	-	-	-	32
N.C.	16	3	4	45	12	2	10	-	-	-	8
S.C., Ga.,	6	2	2	44	5	3	4	7	1	1	25
Fla.	17	-	11	-	-	-	50	-	-	-	22
S. Atl.	18	10	6	26	4	1	5	2	-	-	28
Ky.	21	15	11	33	8	1	-	-	-	-	11
Tenn.	13	8	6	38	16	2	-	3	-	-	14
Ala.	3	3	3	23	8	-	21	-	-	-	39
Miss.	1	5	8	41	21	3	-	3	-	-	18
Ark.	5	3	3	33	4	1	1	3	-	11	36
La.	2	2	14	22	2	-	-	-	-	-	58
Okla.	41	-	5	6	2	1	4	4	6	20	11
Tex.	16	-	-	-	-	-	3	-	10	1	70
S. Cent.	17	6	6	25	8	1	2	2	3	4	26
Mont.	53	3	2	-	-	-	-	13	-	8	21
Idaho	92	1	2	-	-	-	-	1	-	-	4
Wyo.	79	6	-	-	-	-	-	8	-	3	4
Colo.	74	6	4	-	-	-	-	6	2	2	6
Utah	90	4	2	-	-	-	-	2	-	2	-
Wash.	21	16	1	-	-	-	-	-	-	-	62
Oreg.	42	-	24	-	-	-	-	7	-	-	27
Calif.	81	-	4	-	-	-	-	11	-	4	-
West.	63	5	5	-	-	-	-	5	1	2	19
U.S.	33.1	15.2	8.5	7.9	2.6	3	7	8	1.0	2.7	26.7

¹/Based on the reporters' indication of kind of hay upon which the values per ton shown in table 7 were reported.

²/"Mixed and other" includes all kinds except alfalfa, clover, and timothy and clover.

³/"Clover and timothy" includes some straight clover.

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